| ADVISORY: 4167 | DATABASE ADMINISTRATION | DATE: 08/10/91 |
|_____| |_____|

| TITLE: How to Convert DB-Keys |
| |
|_____|

| Purpose |
|_____|
To inform IDMS users on how to convert IDMS DB-Keys to individual page
and line numbers.

| Reference |
|_____|
      IDMS DB/DC DML COBOL Reference (release 5.7)
      IDMS/R Database Operations

| General Information |
|_____|
To convert a DB-Key into individual page and line numbers use the
following algorithm:

             DBKEY-PAGE = DBKEY / 256

             DBKEY-LINE = DBKEY - (DBKEY-PAGE * 256)

             DBKEY is the four-byte binary database key.
             DBKEY-PAGE is the three-byte binary database page number.
             DBKEY-LINE is the one-byte binary database line number.

These algorithms can be coded in COBOL as follows:

 The DB-Key should be moved to a larger field before the actual equation.

 MOVE DBKEY TO EXPANDED-DBKEY.

 DIVIDE EXPANDED-DBKEY BY 256
    GIVING DBKEY-PAGE
      REMAINDER DBKEY-LINE.

 EXPANDED-DBKEY is defined as S9(10) COMP SYNC.